MOLLUSCAN NOMENCLATURAL PROBLEMS AND SOLUTIONS.—NO. 1.

By TOM IREDALE.

Read 11th January, 1918.

SUMMARY.

Tritonia, Cuvier, discussed.

Euphurus, Rafinesque, 1815, should replace Triopa, Johnston, 1838. Sphærostoma, Macgillivray, 1843, must be used instead of Tritonia, Cuvier, 1803, and of recent authorities, not of Cuvier-Lamarck, 1798-1801.

Dotona, gen. nov. for Melibæa fragilis, Forbes = Doto, Oken, 1815, not 1807.

Eubranchus, Forbes, 1838, should be used for *Galvina*, Alder & Hancock.

Laskeya, nom. nov. for Eumeta, Mörch, 1868, not Walker, 1855.

Collonista, gen. nov. for Collonia picta, Pease.

Talopena, gen. nov. for Monilea incerta, Iredale.

Korovina, gen. nov. for Vanikoro wallacei, Iredale.

Forskalena, gen. nov. for Trochus fanulum, Gmelin.

Enigmonia, gen. nov. for Anomia rosea, Gray = Anigma anigmatica, anett.

Amyclina, gen. nov. for Buccinum corniculum, Olivi.

Pyreneola, gen. nov. for Columbella abyssicola, Brazier.

Caporbis, Bartsch, is a Vermetid nucleus.

Propebela, gen. nov. for Murex turricula, Mont.

Calceolata, nom. nov. for Calceolina, A. Adams.

Microthyca, not Microtheca.

Turrid names discussed.

Colicryptus, gen. nov. for Buccinum fusiforme, Broderip.

Siphonorbis marshalli, nom. nov. for Fusus attenuatus, Jeffreys. Cominella and Euthria subdivided :--

Afrocominella, gen. nov. for elongata, Dunker.

Burnupena, gen. nov. for porcatum, Gmel. = cincta, Bolten.

Evarne, H. & A. Adams, must be used for linea, Martyn.

Euthrena, gen. nov. for vittata, Quoy & Gaimard.

Japeuthria, gen. nov. for ferrea, Reeve.

Syntagma, nom. nov. for Donovania, Bucquoy, D., & Dollfus.

Acostæa, Orbigny, will replace Mulleria, Férussac, 1823.

Gistel's Molluscan Generic Names, 1848, enumerated.

Damoniella, gen. nov. for Bulla cranchii, Fleming.

Muricodrupa, gen. nov. for Purpura fenestrata, Blainville.

Teretianax, gen. nov. for Scalenostoma suteri, Oliver.

It seems appropriate to initiate some general title for articles such as I have been lately contributing to these Proceedings, and hope to continue to do. The solutions in many cases are comparable to that applied to the Gordian Knot, and I may hereafter find that in this method I have been anticipated. In a similar case reproach was levelled at the worker, but at the present time I conclude it is the only means of making progress. Thus, quite recently, I published some notes giving the correct names as determined at that time: such decisions were based on my own results, confirmed by the usage of such specialists as Dall, Hedley, Cossmann, etc., yet continuing my investigations I find further corrections necessary, and the case of *Eumeta* herein given may be quoted as an example, while I have others under consideration, such as *Azor*.

TRITONIA, Cuvier.

As introducing a number of nomenclatural complexes the genus name Tritonia furnishes a good example. The first introduction of this name seems to be that of Cuvier in the Tabl. Elém. Hist. Nat., Jan. 1798, p. 387, where a genus is diagnosed but no species are named in connexion. The name Tritonium had been proposed at an earlier date. Under the usage of British workers the later name should be discarded, but in this case for some unknown reason the practice was not followed. In 1801 Lamarck accepted the Cuvierian name and gave as example the species clavigera, Müller (Syst. Anim. s. Vert., p. 65, Jan.). According to the International Rules this must be accepted as the monotype of Cuvier's genus, but I cannot understand the ruling, while in this case Cuvier later noted that clavigera, Müller, might be regarded as a member of the genus, but no certainty was expressed. However, in 1800 Meigen correctly proposed the name Tritonia for a genus of Insects: the point is, does the Cuvier-Lamarck name, 1798-1801, anticipate Meigen, 1800?

In the Ann. Mus. Hist. Nat., Paris, vol. i, p. 483, April, 1803, Cuvier fully diagnosed his genus Tritonia, illustrating a fine new species, T. hombergi, and this has gained acceptance as representative of Tritonia and of the family Tritoniidæ. Lamarek's selection, although prior, was dismissed as not being that of Cuvier, and the name Triopa proposed by Johnston (Ann. Nat. Hist., vol. i, p. 123, April, 1838) for clavigera, Müller, has been used instead. It may be noted that the two species hombergi and clavigera belong to very different families. If the Cuvier-Lamarck name be accepted it would displace Triopa. Several substitute names are on record. Euphurus was proposed for Tritonia, Lam., by Rafinesque (Anal. Nat., 1815, p. 142), while Gistel, in 1848, introduced Necromantes and Liriope for Tritonia, Cuvier, mentioning hombergi in the latter case. However, in 1843, Macgillivray had described a new species and genus, Sphærostoma jamesonii (Hist. Moll. Anim. Aberd., pp. 335-6), which has been identified with Tritonia hombergi, Cuvier.

Under these conditions I suggest the rejection of *Tritonia*, Cuvier, as being preoccupied by *Tritonium*, Müller, 1774, and thus remove a most perplexing and unsatisfactory problem from Nudibranch nomenclature.

Then *Euphurus*, Rafinesque, would be available for the genus now called *Triopa*, and *Sphærostoma*, Macgillivray, for the one now bearing the name *Tritonia*, Cuvier, and of the latter *Necromantes* and *Liriope*, Gistel, would be synonyms. I give a full list of Gistel's names later.

DOTONA, gen. nov. for Melibaa fragilis, Forbes.

In other ways than the preceding, Nudibranch names show confusion, and I propose *Dotona* for the species *Melibæa fragilis*, Forbes (Malac. Monensis, 1838, p. 4), the genus name *Doto* quoted as of Oken, 1815, having been used in 1807 by the same author in a different sense.

Galvina, Alder & Hancock, is in use for a group of which one species is the monotype of *Eubranchus*, Forbes, 1838 (loc. cit.), which has priority. Many more instances of this character occur, the case of *Lomanotus*, Verany, being on a parallel with *Tritonia*, Verany's name, 1844-6, being intercepted by *Eumenis*, Alder & Hancock, 1845, which has been rejected.

LASKEYA, nom. nov. for Eumeta, Mörch, 1868.

Recently I concluded that *Eumeta* was the valid generic name for a British shell, because the name had been accepted by Thiele, Hedley, etc. I overlooked the fact, as my co-workers had done, that it was preoccupied by Walker. I therefore propose *Laskeya*, nom. nov. for *Eumeta*, Mörch, 1868. I would note that Locard introduced *Cerithiolinum* (Ann. Soc. Agric. Lyon, ser. 11, vol. x, 1903, p. 110) as a new name for *Lovenella*, Sars, 1878, about twenty years too late.

COLLONISTA, gen. nov. for Collonia picta, Pease.

The genus name *Collonia* has been discussed and is now relegated to fossils agreeing with the type. There seems to be a recent group having much the same features. *Leptothyra* proves to have been first published by Pease in connexion with a juvenile shell of a different genus. The matter is complex and needs careful handling, but I here remedy one item by the above proposition.

TALOPENA, gen. nov. for Monilea incerta, Iredale.

Under the name Monilea many different shell groups have been confused, and when E. A. Smith pointed out that Swainson's description negatived his tentative reference of his type to "callifera, Lam.", he used Solariella, S. V. Wood. That name given to a Crag fossil should not be used in connexion with recent shells showing unlike shell characters. Gray proposed Talopia, apparently for the callifera group, but without diagnosing it, and later cited it as a synonym of Monilea, Swainson, giving callifera, Lam., as type of the genus. Consequently, I conclude Talopia would become valid for the callifera group. This, however, is not congenerie with the austral species commonly referred to Monilea, and two other names have been cited in conjunction with them.

Minolia, A. Adams, and *Conotrochus*, Pilsbry, the latter afterwards being considered by its author as synonymous with the former. Since the last-named is an invalid name, certain corrections seem necessary.

I herewith propose *Talopena* for *Monilea incerta*, which I described from the Kermadecs, and which is typical of a well-marked austral series.

IREDALE: MOLLUSCAN NOMENCLATURAL PROBLEMS.

KOROVINA, gen. nov. for Vanikoro wallacei, Iredale.

When I named Vanikoro wallacei in these Proceedings from the Kermadecs I commented upon the opercular characters, which disagreed with those given for the genus Vanikoro by H. & A. Adams. Mr. Hedley informs me that he has a note upon the invalidity of Vanikoro, with which I agree, so I now propose Korovina for my Kermadec species.

FORSKALENA, gen. nov. for Trochus fanulum, Gmelin.

H. & A. Adams introduced *Forskalia* in the Gen. Rec. Moll., vol. i, p. 432, June, 1854, for *Trochus declivis*, Forskal, *fanulum*, Gmel., etc. The previous year that name had been given by Kolliker (Die Schwimmpolypen von Messina, 1853, p. 2) to a Cœlenterate.

I perpetuate the dedication by alteration to *Forskalena*, the secondnamed species being designated as type. I conclude Forskal was not a binomial writer, so that his species names cannot be legitimately used; since his work was published after his death, the names selected may have simply been preliminary latinized descriptive terms.

ENIGMONIA, gen. nov. for Anomia rosea, Gray.

As a rare and peculiar North Australian molluse, *Ænigma* anigmatica (Chemn.) has been cited. The correct name of the shell proves as perplexing as this combination reads, since it seems neither generic nor trivial name can be maintained. *Ænigma* is credited to Koch, 1846, the quotation (incomplete) referring to Martini & Chemn., Cont., lief. 56, band vii. I have been unable to trace this. My earliest reference is to the quotation by Gray in the Proc. Zool. Soc. Lond., 1849, p. 114, as a MS. name in the cabinet of Mr. Cuming. It was probably so published at the earlier date. However, in April, 1836, E. Newman had published *Ænigma* in the Entom. Mag., ser. HII, vol. v, p. 499, for a beetle.

Tellina anigmatica, Chemnitz, cannot be used because that author was non-binomial, and according to Sherborn's Index Animalium that name was not binomially used before 1800. I have not seen it legitimately employed until 1837, while in Thomson's Annals of Philosophy, N.S., vol. ix, Feb. 1825, p. 139, Gray had introduced Anomia rosea for the species figured by Chemnitz, vol. x, pl. 199, figs. 1949-50. Gray's type is in the British Museum.

AMYCLINA, gen. nov. for Buccinum corniculum, Olivi.

Some years ago I pointed out that *Amyela*, H. & A. Adams, was invalid, and, since I have seen no rectification in the meantime, I propose the new genus *Amyelina* for *Buccinum corniculum*, Olivi.

PYRENEOLA, gen. nov. for Columbella abyssicola, Brazier.

I have already noted the distinctness of this genus without naming it, so here provide the above name, because the group is more or less known, and I cannot as yet publish the full account.

CAPORBIS, Bartsch.

Bartsch, in an essay on South African Marine Molluses (Bull. U.S. Nat. Mus., No. 91, 1915), introduced the name *Caporbis* (p. 170) in

the family Vitrinellidæ. The good figures showed it to be the nucleus of a Vermetid, and Mr. J. R. Le B. Tomlin has recovered examples showing the nucleus perfectly.

PROPEBELA, gen. nov. for Murex turricula, Mont.

The above name is proposed because the species selected as type is not congeneric with those recently associated under *Bela*, and the correct generic name of which is *Oenopota*, Mörch. Most recent authorities have agreed with this conclusion, but have not rectified the error.

CALCEOLATA, nom. nov. for Calceolina, A. Adams.

A. Adams (Ann. & Mag. Nat. Hist., ser. 11, vol. xi, April, 1863, p. 267) introduced a genus *Calceolina*, writing, "This little genus is established on a shell I found at Tanabe, and which I believe to be the same as the *Neritina pusilla* of C. B. Adams." The genus and species were then described, and since the generic name had been anticipated by Rafinesque almost fifty years before, and the species is not that of C. B. Adams, I introduce the new generic name *Calceolata*, while the new specific name will be *anomala*.

MICROTHYCA stands instead of Microtheca.

Two pages earlier A. Adams (op. cit.) proposed *Microthyca*, and this was altered to *Microtheca*, and has since commonly been so spelt; in the latter state it is invalid, so that reversion must be made to the first spelling, otherwise a new name would be necessary.

TURRID GROUP NAMES.

Dr. Dall has recently published (April 5, 1918) two extremely valuable papers in the Proc. U.S. Nat. Mus., vol. liv, entitled "Notes on *Chrysodomus* and other Mollusks from the North Pacific Ocean" (pp. 207-34), and "Notes on the nomenclature of the Mollusks of the family Turritide" (pp. 313-33). Both are really beyond criticism, and the points I here deal with are comparatively trivial, but are offered to complete the cases and draw attention to such items.

The latter is a most complete list of sectional names, and though I have been noting these for some years, I can scarcely make any additions save with regard to incomplete references. Dr. Dall's complete work will be a most invaluable aid to the student of these most puzzling forms, and I anticipate many more sections in connexion with the small Indo-Pacific species, the nuclear characters showing diverse origin in conchologically similar shells, the differences observed being radical, such as the contrast being a highly sculptured "Sinusigera" and a bulbous one-whorled smooth turn.

Thus, *Tomopleura*, Casey, is a well-marked and distinct group which Dall, in one place, refers to *Turris*, s.str., and then to *Teres*, with neither of which can it be confused, while these are very different from each other.

Dall has not seen the paper in the Nat. Sicil., an. ix. May 1, 1890, in which Monterosato proposed *Smithiella*, p. 186, *Villiersiella*, p. 191, and published *Teretia*, p. 187, that name previously appearing only in a privately printed manuscript.

The rejection of *Clionella*, Gray, 1847, in favour of *Melatoma*, Swainson, 1840, seems to need reconsideration, judging from Swainson's figure, since the South African *Clionella* has a short canal quite unlike the long canal indicated by Swainson. I purpose tracing Swainson's type, and in the meantime counsel the retention of the certain name *Clionella*.

Zafra certainly does not seem referable to this family, but I suggest we are confusing several "families" through the influence of the posterior canal. For instance, from the figure, Schepman's *Daphnellopsis* is a close relation to the groups Dall separated as *Maculotriton*, etc., the canal in this case being the one seen in the Bursa family, and not of Turrid significance.

COLICRYPTUS, gen. nov. for Buccinum fusiforme, Broderip.

When this paper was read I had written Colicryptus for Buccinum fusiforme, Broderip. Since then I received Dall's "Notes on Chrysodomus", in which I see he still retains Kryptos, Jeffreys, and says, "Fusus fenestratus, Turton (+fusiforme, Broderip, +Broderipii,Jeffreys) probably belongs to this genus." Dall thus confirms Dautzenberg & Fischer's usage, who claim priority for the first named, indicating also the latter has been anticipated by Kiener, 1834. Their statement is, however, incorrect, since Broderip's name dates from 1830, not 1835, as given by those authorities. Fusus fusiforme has not much likeness to the other members of the group, and I reject Kryptos as preoccupied by Cryptus, a logical conclusion under the International Rules for Nomenclature. I also introduce the new name

SIPHONORBIS MARSHALLI for Fusus attenuatus, Jeffreys,

which is preoccupied by *Fusus attenuatus*, Philippi (Palæontographica, Bd. i, pt. ii, March, 1847, p. 72), while I suggest that Marshall's *Fusus consimilis* is founded on a specimen distorted by fracture.

I am quite unable to understand the reason of Dall's rejection of *Neptunea*, Bolten, in favour of *Chrysodomus*, Swainson, for these whelks, seeing that the former is absolutely valid and has been current for many years without question.

It is strange to find so doughty a champion of Boltenian names and stalwart a protagonist of selection of type by elimination calmly throwing over both with the callous remark (p. 214), "The name *Neptunea*, Bolten, was given to a heterogeneous collection now divided into eight or more genera of several distinct families."

COMINELLA AND EUTHRIA DISCUSSED.

I had drawn up some notes on the species classed under *Cominella* and *Euthria*, when the Rev. Dr. A. H. Cooke informed me he was engaged upon the examination of the radulæ of these groups. I therefore withheld my notes until his work was completed. It is worthy of emphasis that his results coincide more or less with my own conclusions based on shell characters, proving once more the concordance of external and internal features. Some of Dr. Cooke's

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conclusions, based on published accounts, need reconsideration, as for instance "two (species) at least of which are also found in Australian waters". This refers to Neozelanic species and the two cited "costata, Quoy, lineolata, Lam." are not truly Neozelanic. I determined a dead shell as referable to the first named, but I am sure now that was a mistake. Neither does the genus occur at the Kermadees as given by Suter. It is remarkable that one of the radulæ figured by Dr. Cooke (ex Gwatkin coll.) should have been named as "costata, Quoy: New Zealand", and I cannot recognize to what it really belonged. The genus name *Cominella* was proposed by Gray in 1850 (Fig. Moll. Anim., vol. iv, p. 72), the species attached being testudinea, maculosa, etc., and the first-named figured. I here designate that as type. As shown by Dr. Cooke, the radulæ of the Austro-Neozelanic species are similar in type and consequently shell characters have to be considered. The costata-lurida group show a constant shell formation very different from adspersa, maculosa, and virgata. These last three differ among themselves, and a more detailed examination will probably result in their separation. At the present time I propose to deal with the South African" Cominella". which are readily separable by shell characters and whose radulæ are remarkably different. The exact names of these species will be dealt with later, but I introduce Afrocominella for elongata, Dunker, and tigrina, Kiener, designating the former as type, and propose Burnupena for the peculiarly distinct group, delalandii, Kiener. lagenaria, Lam., limbosa, Lam., and porcata, Gmelin, designating the last named as type, while pointing out that the species name is preoccupied and that it should be cincta, Bolten (Mus. Bolten, 1798. p. 113), proposed for Martini, 4, t. 126, figs, 1213-14. So that the type name stands Burnupena cincta (Bolten).

With regard to the radula of *Euthria*, Dr. Cooke has shown that diverse groups have been confounded under this name, a fact communicated to me by Professor Gwatkin many years ago. Cooke places the Neozelanic *linea*, Martyn, with the European *cornea*, L., the type of the genus: the radula is somewhat different and the shell decidedly so, that I revive for it the genus name *Evarne*, proposed by H. & A. Adams, but afterwards ignored. The other Neozelanic species cannot be classed with *linea*, so I introduce the name *Euthrena* for them, naming *vittata*, Quoy & Gaimard, as type.

The extraordinary radula presented by *ferrea*, Reeve, from Japan, proves at once that this species is no relation to either the European *Euthria* or the Southern so-called *Euthria*. In order to attract attention I propose *Japeuthria* for Reeve's species alone. Cooke shows by means of the radulæ that the Magellanic species of *Euthria* belong in reality to *Cominella*, a fact I pointed out to Messrs. E. A. Smith and H. B. Preston some years ago from consideration of conchological features alone.

SYNTAGMA, nom. nov. for Donovania, B., D., & D.

In an essay on Crustacea in Brewster's Edinburgh Encyclopedia, vol. vii, 1814, Leach proposed the generic names *Donorania* (p. 435),

Montagua and Mulleria (p. 436). All these three were later introduced for molluscs, the first and last still being used, the second one rejected on different grounds.

The first-named has been constantly used since 1882, and has no valid synonymy, so I name the genus *Syntagma*, the species *Buccinum brunneum*, Donovan, being retained as type. The genus is included by Dall in his list of Turritidæ, without comment, though years ago M. Woodward showed that the radula was buccinoid.

Acost#A, Orbigny, will replace Mulleria, Férussac, 1823.

As above noted *Malleria* can no longer be used for the well-known freshwater Oyster, but there is a ready-made alternative, *Acostaca*, Orbigny, 1851 (Rev. & Mag. Zool., sér. II, tom. iii, p. 184), available for use.

GISTEL'S MOLLUSCAN GENERIC NAMES, 1848.

In a book entitled "Naturgeschichte des Thierreichs für Schulen", published in 1848, Gistel introduced a large number of corrections (?) of invalid names, and these escaped note for some time, probably through carelessuess, as H. & A. Adams cited many of them in their "Genera of Recent Mollusca". The names are recorded in two places: firstly, in a prefatory discussion on preoccupied names, and secondly, in the body of the work. The former list was obviously compiled as an after-thought, and frequently Gistel has named the same thing twice, and just as often used the same name twice in different connexions, while he very commonly selected preoccupied names in his corrections. Since the book is not well known and the names may need consideration, I give a list of the Gistel innovations, as follows :—

o. viii.	Cerana, new name for	Artemis, Conchyl. Anton Cat.
•	Ebion	Bonellia, der Conchyl. Anton Conchyl.
		Cat., Cerithium.
	Macropelmus	Calcar, Montfort; Trochus imperialis, Lam.
	Fabius	Cavolinia, Brug., Isis, 1834, p. 263, Escheh. Zool. Atlas.
	Potamius	Cavolinia, D'Orb., Isis, 1839, p. 522.
	Geodes	Achatina, Lam., Mollusq.
	Ephrada	Buchanaania, Lesson, 1830; Isis, 1833, p. 126, Mollusk.
	Averna	Ceratophora, d'Orb. = Cerophora Hyalæa.
	Symmethus	Brocchia, Bronn, Reise ii, p. 479, Fossil, Patella.
	Epulo	Cirrotenthis, Eschricht. Act. Leop. Acad., vol. xviii, p. 2.
	Harpax	Cummingia, Broderip, Conchyl. Isis, 1835, p. 452.
	Hyperia	Cuvieria, Lesson, Rang, etc., Isis, 1839, 497.

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p. 1	viii.	Cencus, new name for	Cyclops, Lam., Conchyl.
1		Cænobita	Chromocochlea, C. turbinoides.
		Cleone	Dipsas, Leach, Mytilus.
р. і	x.	Hydromyles	Eurybia, Rang, Isis, 1829, p. 519.
1.		Hydrodactes	Gervillia, Defrance, Foss. Austr.
		Asmena	Melanopsis, Lam.
		Epistrophea	Eledone, Leach, Sepia.
		Lora	Defrancia, Millet, Gasterop; D. viri-
		10/10	dula, O. Fabr.
		Lithoparches	Melania, Conchyl.
		Endrastus	Peronia, Quoy, Isis, 1834, p. 287.
p. :	л.	Potamius	Potamis, Brong., Buccinum.
			Proboscidea, Sch., Buccinum igneum,
		Ecmanis	Lin.
		Anonaia	
		Anopsia	Psyche, Rang, em. Clio.
		Epitychusa	Rossia, Owen, Cephalopoda palpebrosa.
			Physa, Draparnaud, Schnecke.
		Apanthausa	Rissoa, Frém., Gasterop.
р.	X1.	Nyctilochus	Triton, Broderip, Isis, 1835, p. 453.
		Erethismus	Trichia, Hartm., Schnecke, 1842,
			T. clandestina.
		Necromantes	Tritonia, Cuvier, Mollusq.
		Amphibulima	Succinea, Draparn., Schnecke.
		.Artopoia	Terebellum, Lam., Schnecke.
		Oicodespina	Villersia, d'Orbigny in Guérin,
			Magas., vol. vii.
		Pagana	Vitrina, Drap., Mollusk.
р.	xiv.	Cordium	Cardium.
-		Cordissa	Cardissa.
		Eustylon	Cacophonia, p. 172.
р.	166.	Crino	Limacina.
		. Oncæa	Achatina.
*		Chernites	Neritina.
p.	169.	. Anatasia	Rissoa.
1		Hydrognoma	Melania.
		Ceneona	Melanopsis.
		Curassa	Pedipes.
		Orthopnæa	Phasianella.
		Pimpellies	Monodonta.
		Achates	Janthina (communis).
		Scalator	Delphinula.
p.	170	. Lucis	Terebellum.
X		Galanthis	Eburna (tessellata).
		Charonia	Tritonium tritonis.
p.	171	. Potamis	Potamides, Brong.
Ŀ.		Dadone	Glaucus (eucharis and atlantica).
		Liriope	Tritonia (hombergi).
n	179	. Haplomochlia	Psammobia.
P•	1.2	Butor	Anatina.
		Cacophonia	Lutraria.
		Oucophonia	a a toor tor toor

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р.	172.	Isarcha, new name for	Sanguinolaria, Lam.
-		Procos	Capsa.
		Armida	Cyprina.
		Cerceis	Hippopus.
р.	173.	Eufira	Iridina, Lam.
p.	174.	Nausimacha	Laniogerus.
•		Philopseudes	Psyche.
		Herse	Cuvieria.

I have already drawn attention to Lora, Anopsia, Hydromyles, Charomia, and would here note that Hyperia and Herse, both provided for Curieria, were each invalid, but such a name as Ecmanis may later be called into use. If a substitute for Glaucus be needed Dadone must be considered, while the two substitutes for Cavolinia as used by Escheholtz & d'Orbigny need criticism, but as Fabius is invalid neither may claim usage. The consideration of the preceding confirms my conclusion that all are absolutely substitute names, and can only be determined as such, and consequently the mention of a species cannot legitimatize Gistel's name in that connexion as opposed to its substitution value.

DAMONIELLA, gen. nov. for Bulla cranchii, Fleming.

In the Proc. Zool. Soc. Lond., 1847, p. 161, "Roxania, Leach MSS., 1819. Bulla cranchii" was given by Gray. This was published in November, but in the October number for the same year of the Ann. & Mag. Nat. Hist., vol. xx, p. 268, the name had been printed as "Roxania cranchii", which twenty years before Turton, in the Zool. Journ., vol. ii, p. 566, 1826, had recorded from Torbay and Scarborough. However, Bulla cranchii was not described until 1828, when Fleming gave an account in his Hist. Brit. Anim. (ante April 1), p. 292, from specimens received from Leach procured at Plymouth Sound. Leach was apparently distributing species under his generic names to different people, and, moreover, different species were confused. Thus Lamarck described Bulla cornea from specimens received from England, citing as a synonym Bulla crancki, Leach. This species has been identified as Bulla hydatis, Linné, which seems to invalidate the specific name. Then in the Mag. Nat. Hist. (Loudon), vol. vii, p. 352, July, 1834, Turton described Bulla hyalina, citing in association with it the genus name Roxania, Leach MS. This seems to be the earliest legitimate use of the name. Since this species is quite unlike the usually accepted one, it is fortunate that Stephens had previously proposed Roxana for a genus of Lepidoptera.

There is no necessity to quibble as to whether *Roxania* and *Roxana* may be used independently, because the name is that of one of the wives of Alexander the Great, and appears under both spellings in history. In the proof-sheets of the Synopsis of the Mollusca of Great Britain, printed in 1819, the name appears on pp. 49 and 60 as *Roxania*, but in the MS. index, written by J. E. Gray, it is spelt *Roxana*.

I might here note that *Mangelia* was invented by Leach and accepted by Risso, and it is a pure coincidence that it should look like a name intended to honour Mangili, with whom, as far as I have been able to trace, it has absolutely no connexion. Through inattention to this detail some of our most conscientious writers have spelt it *Mangilia*.

MURICODRUPA, gen. nov. for Purpura fenestrata, Blainville.

A certain peculiar shell has long been known as Ricinula (or The generic name was Sistrum) cancellata, Quoy & Gaimard. inapplicable, and I now find the specific one also doubly invalid, being anticipated as well as preoccupied. Firstly, Drupa, Bolten, is earlier than Ricinula or Sistrum, as well as Ricinella, all based on the same group. The shell under consideration was obviously not congeneric with the members of that genus. Lumped in, however, was a series of smaller shells whose generic name appears to be Morula, and it was likewise discordant with these. Shells more like, also included, have been separated by Martens as Semiricinula. I noted this name used subgenerically in the Wissenseh. Ergeb. Deutsch. Tiefsee Exped., Valdivia, 1903, vol. vii, pp. 95 and 137, without indication of novelty, so that it may have been previously proposed, but the name does not appear in the Zoological Record so far as I have seen. I therefore name muricina, Blainville, as type, and for the shell named Purpura fenestrata, Blainville, 1832 = cancellata, Quoy & Gaimard, 1833, not of Bolten, 1798, I add Muricodrupa.

In arriving at this result the following facts came to light. In January, 1832, Duclos published a preliminary note (Ann. Sci. Nat., tom. xxv, pp. 90-5) on Purphroid shells, following it up with a further item in May (op. cit., tom. xxvi, pp. 103-12), describing some new species, and declaring his intention of monographing the group with illustrations. He quoted (p. 109) the publication of Valenciennes' species, *P. speciosa*, which he described as *P. centriquadra*. After June, but before August, Blainville published a complete monograph, and therein named species figured by Quoy & Gaimard in the Atlas to the Voyage of the *Astrolabe* under vernacular names, the text to the latter not appearing until 1833. The chronology reads thus: *Ante* May, 1832, Valenciennes; May, 1832, Duclos; *post June, ante* August, 1832, Blainville; 1833, Quoy & Gaimard. The species concerned seem to be

Purpura canaliculata, Valenciennes, antedates P. canaliculata, Duclos. chaidea, Duclos P. nassoidea, Blainville

		= P. nassoides, Quoy & Gaimard.
speciosa, Valenciennes	,,	P. centriquadra, Duclos.
granulata, Duelos	,,	P. tuberculata, Blain- ville.
bicarinata, Blainville	; ,	P. helena, Quoy & Gaimard.

"

Purpura monodonta, Blainville, antedates P. monodonta, Quoy &

fenestrata, Blainville

P. monodonta, Quoy & Gaimard.

P. cancellata, Quoy & Gaimard, not of Bolten, Mus. Bolt., 1798, p. 143.

However, P. chaidea, Duclos, is claimed to be identical with the prior Purpura nodulifera, Menke, 1829.

The species Duclos described as *Purpura spharidia* has been recognized as *Ricinula morus*, Lamarck, which name is later than *Morula papillosa*, Schumacher, and which I determine as *Drupa uva*, Bolten (Mus. Bolten, 1798, p. 56). In order to avoid change of the well-known morus Pilsbry has recently pleaded that the figure given by Chemnitz was not accurately determinable. The description, however, is very good. He would then fall back upon the illustration in the Tabl. Encycl. Méthod., pl. 395, fig. 6. Here again danger lies, because that figure was named *Ricinula nodus* by Lamarck himself prior to his proposal of the name morus for the same shell.

The outstanding groups appear to be as follows :---

- Drupa, Bolten, 1798 (type, Murex ricinus, Linné) = Sistrum, Montfort, 1810 = Ricinula, Lamarck, 1816 = Ricinella, Schumacher, 1817.
- Morula, Schumacher, 1817 (type, M. papillosa = Drupa uva, Bolten, 1798).

Semiricinula, Martens, 1903 (type, Parpura muricina, Blainville). Muricodrupa, gen. nov. for Purpura fenestrata, Blainville.

I had ranged the species in order when Dr. Cooke informed me that he proposes to develop his studies on the radulæ in the near future, and his notes show that in this group not only shell distinctions coincide with radular differences, but also that convergence in shell features may mask divergence in the characters of the radula.

TERETIANAX, gen. nov. for Scalenostoma suteri, Oliver.

Bartsch in his "Monograph of West American Melanellid Mollusks" (Proc. U.S. Nat. Mus., vol. liii, Aug. 1917, pp. 295-356) has in my opinion misused group names in an extraordinary manner. One item will suffice: *Melanella*, Bowdich, is employed, two subgenera being accepted, *Melanella*, s.str., and *Balcis*, Leach, 1852. The former is characterized "Melanellas with straight shells", the latter "Melanellas with flexed shells". The diagnosis of *Melanella* reads "Turreted; spire curved", and the type of *Balcis* is a straight shell and is so included by Bartsch himself. In the Bull. U.S. Nat. Mus. No. 90, Jan. 21, 1915, his colleague, Dr. Dall, gave a cursory review of the group, writing the facts correctly.

On p. 354 Bartsch used *Lambertia* as of Souverbie, 1869, but that name was invalid and had been corrected to *Hypermastus* by Pilsbry in a paper quoted elsewhere in this essay by Bartsch. As a matter of fact I note many group names missing which might have significance in connexion with the new groups introduced by Bartsch. He greatly confuses *Subeulima* and *Scalenostoma*, as may be seen from the fact that he has described a *Subeulima magnifica*, a shell 5 mm. long, whereas the type was 23 mm. long and not congeneric.

I hope to deal thoroughly with this group later on, for I possess species belonging to such rare sections as *Selma*, A. Adams, *Apicalia*, A. Adams, and *Hoplopteron*, Fischer, the last named appearing to be misunderstood by both Dall and Bartsch. In the meanwhile I propose *Teretianax* for the shell from the Kermadecs described by Oliver under the name *Scalenostoma suteri*, a doubtful member of this family (?).